REMARKS

The invention, as claimed in independent claim 1, relates to a light-emitting diode including a substrate, a light-generating layer on the substrate, a transparent current-spreading layer on the light-generating layer, a first electrical contact layer on the back of the substrate, and a second electrical contact layer on the current-spreading layer. The top surface of the current-spreading layer has vertical structuring (e.g., prisms, pyramids, cones, etc.) to improve the decoupling of light, and the second electrical contact layer has a lateral structure (e.g., structures 51-54 shown in Figs. 2-4) that substantially uniformly couples electrical current into the current-spreading layer. Claim 1 has been amended to recite that the second electrical contact layer is directly deposited on the current-spreading layer.

Independent claim 14 includes all of the features of amended claim 1 and in addition recites that the second electrical contact layer has a lateral structure with a circumferential contact web arranged about a central contact structure.

New claims 17 and 18 depend on claims 1 and 14 respectively and recite that the lateral structure extends over and directly contacts the vertical structuring of the current spreading layer.

The prior rejections of independent claims 1 and 14 under 35 USC 103(a) on the basis of:

(1) Krames in view of Nozaki,

(2) Nozaki in view of Krames, and

(3) Nishitani (JP 07-162037) in view of Nozaki,

all rely on the purported disclosure in Nozaki of an upper electrode (20) with a lateral structure "disposed on" a current spreading layer (6), and the disclosure in another reference (Krames or JP 07-162037) for vertical structuring. As was noted in the prior response, the electrode 20 is not disposed on the current spreading layer 6 in Nozaki but is instead disposed on contact layer 7, which is in turn disposed on current spreading layer 6, and Nozaki teaches that the intervening contact layer is important for achieving an ohmic characteristic such that a person skilled in the art would not omit the contact layer (7) between the current spreading layer (6) and the electrical contact (20).

In the office action, the examiner did not find this distinction "persuasive" with respect to the claims, "because the claim language only states that the upper electrode is disposed 'on' the current spreading layer, and not 'directly on top of the current spreading layer with no intervening layers.'"

In response to this comment, the applicants have amended claims 1 and 14 to make it clear that the upper electrode is "directly deposited" on the current spreading layer, such that this basis for the rejection no longer applies.

In the office action the examiner also argued that "it is clear to a person skilled in the art that the lack of such a layer [7 in Nozaki] would not destroy the function of the laterally structured electrode," and that "Krames does not teach an ohmic contact layer" and "one could simply take the teaching of a laterally structured electrode from Nozaki when combining references."

Such selective picking and choosing of isolated features from a device described in a reference to support a claim rejection, and excluding other features of the reference that are inconsistent with the claim being rejected, using the applicant's patent application as a guide, is error as a matter of law for failure to consider what is fairly taught by the full teaching of a reference and amounts to classic hindsight reconstruction, which is inappropriate under 35 USC 103(a).

If a person skilled in the art were to modify one of the other references in view of Nozaki or vice versa, he or she would incorporate a current spreading layer (6), a contact layer (7) and a second electrical contact (20) in the Krames LED. Nozaki points out that the contact layer (7) and a sintering process for the electrode (20) on the contact layer (7) is important for achieving an ohmic characteristic. Therefore a person skilled in the art would not omit the contact layer (7) between the current spreading layer (6) and the electrical contact (20) in order to optimize the coupling of the current into the current spreading layer.

Accordingly, the subject matters of claims 1 and 14 are patentable over the cited references. The dependent claims depend on claim 1 or 14 and are allowable for the same reasons. In addition, at least some of these claims add features further distinguishing the prior

art. For example, new claims 17 and 18 depend on claims 1 and 14 and recite that the lateral structure extends over and directly contacts the vertical structuring of the current spreading layer, something which is not disclosed in any of the cited references. In addition, claims 7 and 13 disclose pyramids, which are not disclosed or suggested by the references.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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